

SCREENING DEVICE AND METHODS OF SCREENING
IMMUNOASSAY TESTS AND AGGLUTINATION TESTS

ABSTRACT OF THE DISCLOSURE

5 Immunoassay tests or agglutination tests run on samples of
bodily fluid to detect the presence of particular compounds
such as drugs in the body may be screened in the screening
device. A test membrane is inserted into the screening
device and illuminated. The reflected image is detected and
10 the digitised data processed. For immunoassay tests, the
digitised data is segmented and data for the test region is
compared to that from the control region and the background
regions to determine whether the test data exhibits any
15 significant results. For agglutination tests, the digitised
data is processed to determine the number and size of the
areas of coagulation to determine whether the test data
exhibits any significant results.

A swab for taking a bodily sample incorporates a run fluid
capsule. Once an adequate sample of bodily fluid has been
20 collected and the swab is placed in contact with the test
membrane, the run fluid capsule is pierced by a spike
provided on the swab, the run fluid mixes with the sample
and the mixture is conveyed to the test membrane.
25 Alternatively or in addition the swab has a main tube and a
capillary tube. A run detector in the capillary tube
detects when an adequate sample of bodily fluid has been
taken.